
Product Name: NFκB-p105/p50 (phospho Ser337) Rabbit Polyclonal Antibody**Catalog #: APRab05097**

For research use only.

Summary

| | |
|----------------------|---|
| Description | Rabbit polyclonal Antibody |
| Host | Rabbit |
| Application | WB,IHC,ICC/IF,ELISA |
| Reactivity | Human,Mouse,Rat |
| Conjugation | Unconjugated |
| Modification | Phosphorylated |
| Isotype | IgG |
| Clonality | Polyclonal |
| Form | Liquid |
| Concentration | 1mg/ml |
| Storage | Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles. |
| Shipping | Ice bags |
| Buffer | Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N. |
| Purification | Affinity purification |

Application**Dilution Ratio** WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:200-1:1000,ELISA 1:10000-1:20000**Molecular Weight****Antigen Information**

| | |
|--------------------------|--|
| Gene Name | NFKB1 |
| Alternative Names | NFKB1; Nuclear factor NF-kappa-B p105 subunit; DNA-binding factor KBF1; EBP-1; Nuclear factor of kappa light polypeptide gene enhancer in B-cells 1 |
| Gene ID | 4790.0 |
| SwissProt ID | P19838 |
| Immunogen | The antiserum was produced against synthesized peptide derived from human NF-kappaB p105/p50 around the phosphorylation site of Ser337. AA range:304-353 |

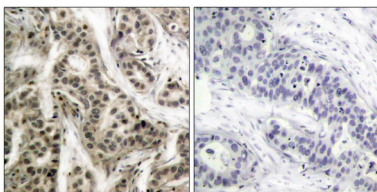
Background

nuclear factor kappa B subunit 1(NFKB1) Homo sapiens This gene encodes a 105 kD protein which can undergo cotranslational processing by the 26S proteasome to produce a 50 kD protein. The 105 kD protein is a Rel protein-specific transcription inhibitor and the 50 kD protein is a DNA binding subunit of the NF-kappa-B (NFKB) protein complex. NFKB is a transcription regulator that is activated by various intra- and extra-cellular stimuli such as cytokines, oxidant-free radicals, ultraviolet irradiation, and bacterial or viral products. Activated NFKB translocates into the nucleus and stimulates the expression of genes involved in a wide variety of biological functions. Inappropriate activation of NFKB has been associated with a number of inflammatory diseases while persistent inhibition of NFKB leads to inappropriate immune cell development or delayed cell growth. Alternative splicing results in multiple transcript variants encoding different isoforms:Glycine-rich region (GRR) appears to be a critical element in the generation of p50.,domain:The C-terminus of p105 might be involved in cytoplasmic retention, inhibition of DNA-binding, and transcription activation.,function:NF-kappa-B is a pleiotropic transcription factor which is present in almost all cell types and is involved in many biological processes such as inflammation, immunity, differentiation, cell growth, tumorigenesis and apoptosis. NF-kappa-B is a homo- or heterodimeric complex formed by the Rel-like domain-containing proteins RELA/p65, RELB, NFKB1/p105, NFKB1/p50, REL and NFKB2/p52 and the heterodimeric p65-p50 complex appears to be most abundant one. The dimers bind at kappa-B sites in the DNA of their target genes and the individual dimers have distinct preferences for different kappa-B sites that they can bind with distinguishable affinity and specificity. Different dimer combinations act as transcriptional activators or repressors, respectively. NF-kappa-B is controlled by various mechanisms of post-translational modification and subcellular compartmentalization as well as by interactions with other cofactors or corepressors. NF-kappa-B complexes are held in the cytoplasm in an inactive state complexed with members of the NF-kappa-B inhibitor (I-kappa-B) family. In a conventional activation pathway, I-kappa-B is phosphorylated by I-kappa-B kinases (IKKs) in response to different activators, subsequently degraded thus liberating the active NF-kappa-B complex which translocates to the nucleus. NF-kappa-B heterodimeric p65-p50 and RelB-p50 complexes are transcriptional activators. The NF-kappa-B p50-p50 homodimer is a transcriptional repressor, but can act as a transcriptional activator when associated with BCL3. NFKB1 appears to have dual functions such as cytoplasmic retention of attached NF-kappa-B proteins by p105 and generation of p50 by a cotranslational processing.

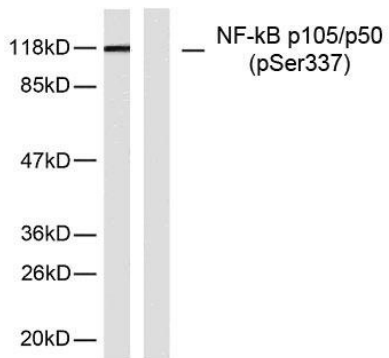
Research Area

T_Cell_Receptor; B_Cell_Antigen; Stem_cell_pathway; Toll_Like; MAPK_ERK_Growth;MAPK_G_Protein; PI3K/Akt; Protein_Acetylation

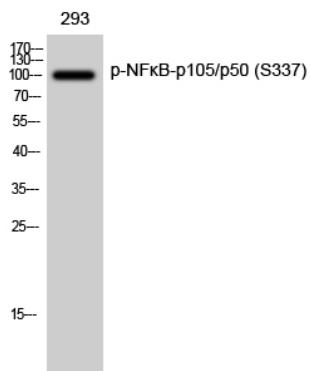
Image Data



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma, using NF-kappaB p105/p50 (Phospho-Ser337) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from MDA-MB-435 cells, using NF-kappaB p105/p50 (Phospho-Ser337) Antibody. The lane on the left is blocked with the phospho peptide.



Western Blot analysis of 293 cells using Phospho-NFkB-p105/p50 (S337) Polyclonal Antibody diluted at 1: 1000